[PICTURES IN CLINICAL MEDICINE]

Capnocytophaga Sputigena Sepsis in a Severe Aplastic Anemia Patient

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Picture 1.

A 72-year-old Japanese woman with severe aplastic anemia refractory to 3-week immunosuppressive therapy including cyclosporine and antithymocyte globulin presented with fever and mucositis on her lower lip and tongue (Picture 1). Gram-negative rods were detected in blood cultures at the onset of febrile neutropenia (Picture 2), which 16S ribosomal RNA gene sequencing later identified as *Capnocytophaga sputigena*. The patient died of multiple organ failure in spite of treatment with antibiotics for susceptible bacteria.

C. sputigena is part of the normal oral flora in humans but it can cause bacteremia associated with mucositis in neutropenic patients (1). *Capnocytophaga* species exhibit medium-length to long gram-negative spindle-shaped rods, features which are useful for making an early presumptive diagnosis. Further, an increase in beta-lactamase-producing strains raises the risk of this infection in neutropenic patients (1, 2). Although beta-lactam/beta-lactamase inhibitor

Picture 2.

combinations constitute an important treatment for *C. sputigena* infection, further comprehensive therapeutic strategies are needed, especially for the treatment of immunosuppressed patients.

The authors state that they have no Conflict of Interest (COI).

References

1. Isabel R. *Capnocytophaga sputigena* bacteremia in a neutropenic host. IDcases **17**: e00536, 2019.
2. Jolivet-Gougeon A, Buffet A, Dupuy C, et al. In Vitro Susceptibilities of *Capnocytophaga* Isolates to β -Lactam Antibiotics and β -Lactamase Inhibitors. Antimicrob Agents Chemother **44**: 3186-3188, 2000.

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